

# SEQUENCE LISTING

<110> Vinkemeier, Uwe  
Darnell Jr., James E.

<120> PURIFIED STAT PROTEINS AND METHODS OF PURIFYING THEREOF

<130> 600-1-182 N

<140> 08/951,130

<141> 1997-10-15

<150> 60/028,176

<151> 1996-10-15

<160> 16

<170> PatentIn Ver. 2.0

<210> 1

<211> 750

<212> PRT

<213> Homo sapiens

<400> 1

Met	Ser	Gln	Trp	Tyr	Glu	Leu	Gln	Gln	Leu	Asp	Ser	Lys	Phe	Leu	Glu
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Tyr	Leu	Ala	Gln	Trp	Leu	Glu	Lys	Gln	Asp	Trp	Glu	His	Ala	Ala	Asn
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Asp	Val	Ser	Phe	Ala	Thr	Ile	Arg	Phe	His	Asp	Leu	Leu	Ser	Gln	Leu
	50						55				60				

Asp	Asp	Gln	Tyr	Ser	Arg	Phe	Ser	Leu	Glu	Asn	Asn	Phe	Leu	Leu	Gln
65					70					75				80	

His	Asn	Ile	Arg	Lys	Ser	Lys	Arg	Asn	Leu	Gln	Asp	Asn	Phe	Gln	Glu
				85					90					95	

Asp	Pro	Ile	Gln	Met	Ser	Met	Ile	Ile	Tyr	Ser	Cys	Leu	Lys	Glu	Glu
				100					105					110	

Arg	Lys	Ile	Leu	Glu	Asn	Ala	Gln	Arg	Phe	Asn	Gln	Ala	Gln	Ser	Gly
		115					120						125		

Asn Ile Gln Ser Thr Val Met Leu Asp Lys Gln Lys Glu Leu Asp Ser																			
130						135					140								
Lys Val Arg Asn Val Lys Asp Lys Val Met Cys Ile Glu His Glu Ile																			
145					150				155									160	
Lys Ser Leu Glu Asp Leu Gln Asp Glu Tyr Asp Phe Lys Cys Lys Thr																			
				165				170										175	
Leu Gln Asn Arg Glu His Glu Thr Asn Gly Val Ala Lys Ser Asp Gln																			
			180					185										190	
Lys Gln Glu Gln Leu Leu Leu Lys Lys Met Tyr Leu Met Leu Asp Asn																			
			195				200						205						
Lys Arg Lys Glu Val Val His Lys Ile Ile Glu Leu Leu Asn Val Thr																			
210						215					220								
Glu Leu Thr Gln Asn Ala Leu Ile Asn Asp Glu Leu Val Glu Trp Lys																			
225					230					235								240	
Arg Arg Gln Gln Ser Ala Cys Ile Gly Gly Pro Pro Asn Ala Cys Leu																			
				245					250									255	
Asp Gln Leu Gln Asn Trp Phe Thr Ile Val Ala Glu Ser Leu Gln Gln																			
			260					265										270	
Val Arg Gln Gln Leu Lys Lys Leu Glu Glu Leu Glu Gln Lys Tyr Thr																			
			275				280											285	
Tyr Glu His Asp Pro Ile Thr Lys Asn Lys Gln Val Leu Trp Asp Arg																			
290						295					300								
Thr Phe Ser Leu Phe Gln Gln Leu Ile Gln Ser Ser Phe Val Val Glu																			
305					310				315									320	
Arg Gln Pro Cys Met Pro Thr His Pro Gln Arg Pro Leu Val Leu Lys																			
				325					330									335	
Thr Gly Val Gln Phe Thr Val Lys Leu Arg Leu Leu Val Lys Leu Gln																			
			340					345										350	
Glu Leu Asn Tyr Asn Leu Lys Val Lys Val Leu Phe Asp Lys Asp Val																			
			355				360						365						
Asn Glu Arg Asn Thr Val Lys Gly Phe Arg Lys Phe Asn Ile Leu Gly																			
370						375					380								

Thr	His	Thr	Lys	Val	Met	Asn	Met	Glu	Glu	Ser	Thr	Asn	Gly	Ser	Leu	385	390	395	400
Ala	Ala	Glu	Phe	Arg	His	Leu	Gln	Leu	Lys	Glu	Gln	Lys	Asn	Ala	Gly	405	410	415	
Thr	Arg	Thr	Asn	Glu	Gly	Pro	Leu	Ile	Val	Thr	Glu	Glu	Leu	His	Ser	420	425	430	
Leu	Ser	Phe	Glu	Thr	Gln	Leu	Cys	Gln	Pro	Gly	Leu	Val	Ile	Asp	Leu	435	440	445	
Glu	Thr	Thr	Ser	Leu	Pro	Val	Val	Val	Ile	Ser	Asn	Val	Ser	Gln	Leu	450	455	460	
Pro	Ser	Gly	Trp	Ala	Ser	Ile	Leu	Trp	Tyr	Asn	Met	Leu	Val	Ala	Glu	465	470	475	480
Pro	Arg	Asn	Leu	Ser	Phe	Phe	Leu	Thr	Pro	Pro	Cys	Ala	Arg	Trp	Ala	485	490	495	
Gln	Leu	Ser	Glu	Val	Leu	Ser	Trp	Gln	Phe	Ser	Ser	Val	Thr	Lys	Arg	500	505	510	
Gly	Leu	Asn	Val	Asp	Gln	Leu	Asn	Met	Leu	Gly	Glu	Lys	Leu	Leu	Gly	515	520	525	
Pro	Asn	Ala	Ser	Pro	Asp	Gly	Leu	Ile	Pro	Trp	Thr	Arg	Phe	Cys	Lys	530	535	540	
Glu	Asn	Ile	Asn	Asp	Lys	Asn	Phe	Pro	Phe	Trp	Leu	Trp	Ile	Glu	Ser	545	550	555	560
Ile	Leu	Glu	Leu	Ile	Lys	Lys	His	Leu	Leu	Pro	Leu	Trp	Asn	Asp	Gly	565	570	575	
Cys	Ile	Met	Gly	Phe	Ile	Ser	Lys	Glu	Arg	Glu	Arg	Ala	Leu	Leu	Lys	580	585	590	
Asp	Gln	Gln	Pro	Gly	Thr	Phe	Leu	Leu	Arg	Phe	Ser	Glu	Ser	Ser	Arg	595	600	605	
Glu	Gly	Ala	Ile	Thr	Phe	Thr	Trp	Val	Glu	Arg	Ser	Gln	Asn	Gly	Gly	610	615	620	
Glu	Pro	Asp	Phe	His	Ala	Val	Glu	Pro	Tyr	Thr	Lys	Lys	Glu	Leu	Ser	625	630	635	640

Ala Val Thr Phe Pro Asp Ile Ile Arg Asn Tyr Lys Val Met Ala Ala  
645 650 655

Glu Asn Ile Pro Glu Asn Pro Leu Lys Tyr Leu Tyr Pro Asn Ile Asp  
660 665 670

Lys Asp His Ala Phe Gly Lys Tyr Tyr Ser Arg Pro Lys Glu Ala Pro  
675 680 685

Glu Pro Met Glu Leu Asp Gly Pro Lys Gly Thr Gly Tyr Ile Lys Thr  
690 695 700

Glu Leu Ile Ser Val Ser Glu Val His Pro Ser Arg Leu Gln Thr Thr  
705 710 715 720

Asp Asn Leu Leu Pro Met Ser Pro Glu Glu Phe Asp Glu Val Ser Arg  
725 730 735

Ile Val Gly Ser Val Glu Phe Asp Ser Met Met Asn Thr Val  
740 745 750

<210> 2

<211> 712

<212> PRT

<213> Homo sapiens

<400> 2

Met Ser Gln Trp Tyr Glu Leu Gln Gln Leu Asp Ser Lys Phe Leu Glu  
1 5 10 15

Gln Val His Gln Leu Tyr Asp Asp Ser Phe Pro Met Glu Ile Arg Gln  
20 25 30

Tyr Leu Ala Gln Trp Leu Glu Lys Gln Asp Trp Glu His Ala Ala Asn  
35 40 45

Asp Val Ser Phe Ala Thr Ile Arg Phe His Asp Leu Leu Ser Gln Leu  
50 55 60

Asp Asp Gln Tyr Ser Arg Phe Ser Leu Glu Asn Asn Phe Leu Leu Gln  
65 70 75 80

His Asn Ile Arg Lys Ser Lys Arg Asn Leu Gln Asp Asn Phe Gln Glu  
85 90 95

Asp Pro Ile Gln Met Ser Met Ile Ile Tyr Ser Cys Leu Lys Glu Glu

100

105

110

Arg Lys Ile Leu Glu Asn Ala Gln Arg Phe Asn Gln Ala Gln Ser Gly  
 115 120 125

Asn Ile Gln Ser Thr Val Met Leu Asp Lys Gln Lys Glu Leu Asp Ser  
 130 135 140

Lys Val Arg Asn Val Lys Asp Lys Val Met Cys Ile Glu His Glu Ile  
 145 150 155 160

Lys Ser Leu Glu Asp Leu Gln Asp Glu Tyr Asp Phe Lys Cys Lys Thr  
 165 170 175

Leu Gln Asn Arg Glu His Glu Thr Asn Gly Val Ala Lys Ser Asp Gln  
 180 185 190

Lys Gln Glu Gln Leu Leu Leu Lys Lys Met Tyr Leu Met-Leu Asp Asn  
 195 200 205

Lys Arg Lys Glu Val Val His Lys Ile Ile Glu Leu Leu Asn Val Thr  
 210 215 220

Glu Leu Thr Gln Asn Ala Leu Ile Asn Asp Glu Leu Val Glu Trp Lys  
 225 230 235 240

Arg Arg Gln Gln Ser Ala Cys Ile Gly Gly Pro Pro Asn Ala Cys Leu  
 245 250 255

Asp Gln Leu Gln Asn Trp Phe Thr Ile Val Ala Glu Ser Leu Gln Gln  
 260 265 270

Val Arg Gln Gln Leu Lys Lys Leu Glu Glu Leu Glu Gln Lys Tyr Thr  
 275 280 285

Tyr Glu His Asp Pro Ile Thr Lys Asn Lys Gln Val Leu Trp Asp Arg  
 290 295 300

Thr Phe Ser Leu Phe Gln Gln Leu Ile Gln Ser Ser Phe Val Val Glu  
 305 310 315 320

Arg Gln Pro Cys Met Pro Thr His Pro Gln Arg Pro Leu Val Leu Lys  
 325 330 335

Thr Gly Val Gln Phe Thr Val Lys Leu Arg Leu Leu Val Lys Leu Gln  
 340 345 350

Glu Leu Asn Tyr Asn Leu Lys Val Lys Val Leu Phe Asp Lys Asp Val

355

360

365

Asn Glu Arg Asn Thr Val Lys Gly Phe Arg Lys Phe Asn Ile Leu Gly  
 370 375 380

Thr His Thr Lys Val Met Asn Met Glu Glu Ser Thr Asn Gly Ser Leu  
 385 390 395 400

Ala Ala Glu Phe Arg His Leu Gln Leu Lys Glu Gln Lys Asn Ala Gly  
 405 410 415

Thr Arg Thr Asn Glu Gly Pro Leu Ile Val Thr Glu Glu Leu His Ser  
 420 425 430

Leu Ser Phe Glu Thr Gln Leu Cys Gln Pro Gly Leu Val Ile Asp Leu  
 435 440 445

Glu Thr Thr Ser Leu Pro Val Val Val Ile Ser Asn Val Ser Gln Leu  
 450 455 460

Pro Ser Gly Trp Ala Ser Ile Leu Trp Tyr Asn Met Leu Val Ala Glu  
 465 470 475 480

Pro Arg Asn Leu Ser Phe Phe Leu Thr Pro Pro Cys Ala Arg Trp Ala  
 485 490 495

Gln Leu Ser Glu Val Leu Ser Trp Gln Phe Ser Ser Val Thr Lys Arg  
 500 505 510

Gly Leu Asn Val Asp Gln Leu Asn Met Leu Gly Glu Lys Leu Leu Gly  
 515 520 525

Pro Asn Ala Ser Pro Asp Gly Leu Ile Pro Trp Thr Arg Phe Cys Lys  
 530 535 540

Glu Asn Ile Asn Asp Lys Asn Phe Pro Phe Trp Leu Trp Ile Glu Ser  
 545 550 555 560

Ile Leu Glu Leu Ile Lys Lys His Leu Leu Pro Leu Trp Asn Asp Gly  
 565 570 575

Cys Ile Met Gly Phe Ile Ser Lys Glu Arg Glu Arg Ala Leu Leu Lys  
 580 585 590

Asp Gln Gln Pro Gly Thr Phe Leu Leu Arg Phe Ser Glu Ser Ser Arg  
 595 600 605

Glu Gly Ala Ile Thr Phe Thr Trp Val Glu Arg Ser Gln Asn Gly Gly

610

615

620

Glu Pro Asp Phe His Ala Val Glu Pro Tyr Thr Lys Lys Glu Leu Ser  
625 630 635 640

Ala Val Thr Phe Pro Asp Ile Ile Arg Asn Tyr Lys Val Met Ala Ala  
645 650 655

Glu Asn Ile Pro Glu Asn Pro Leu Lys Tyr Leu Tyr Pro Asn Ile Asp  
660 665 670

Lys Asp His Ala Phe Gly Lys Tyr Tyr Ser Arg Pro Lys Glu Ala Pro  
675 680 685

Glu Pro Met Glu Leu Asp Gly Pro Lys Gly Thr Gly Tyr Ile Lys Thr  
690 695 700

Glu Leu Ile Ser Val Ser Glu Val  
705 710

&lt;210&gt; 3

&lt;211&gt; 582

&lt;212&gt; PRT

&lt;213&gt; Homo sapiens

&lt;400&gt; 3

Ser Thr Val Met Leu Asp Lys Gln Lys Glu Leu Asp Ser Lys Val Arg  
1 5 10 15

Asn Val Lys Asp Lys Val Met Cys Ile Glu His Glu Ile Lys Ser Leu  
20 25 30

Glu Asp Leu Gln Asp Glu Tyr Asp Phe Lys Cys Lys Thr Leu Gln Asn  
35 40 45

Arg Glu His Glu Thr Asn Gly Val Ala Lys Ser Asp Gln Lys Gln Glu  
50 55 60

Gln Leu Leu Leu Lys Lys Met Tyr Leu Met Leu Asp Asn Lys Arg Lys  
65 70 75 80

Glu Val Val His Lys Ile Ile Glu Leu Leu Asn Val Thr Glu Leu Thr  
85 90 95

Gln Asn Ala Leu Ile Asn Asp Glu Leu Val Glu Trp Lys Arg Arg Gln  
100 105 110

Gln Ser Ala Cys Ile Gly Gly Pro Pro Asn Ala Cys Leu Asp Gln Leu  
 115 120 125

Gln Asn Trp Phe Thr Ile Val Ala Glu Ser Leu Gln Gln Val Arg Gln  
 130 135 140

Gln Leu Lys Lys Leu Glu Glu Leu Glu Gln Lys Tyr Thr Tyr Glu His  
 145 150 155 160

Asp Pro Ile Thr Lys Asn Lys Gln Val Leu Trp Asp Arg Thr Phe Ser  
 165 170 175

Leu Phe Gln Gln Leu Ile Gln Ser Ser Phe Val Val Glu Arg Gln Pro  
 180 185 190

Cys Met Pro Thr His Pro Gln Arg Pro Leu Val Leu Lys Thr Gly Val  
 195 200 205

Gln Phe Thr Val Lys Leu Arg Leu Leu Val Lys Leu Gln Glu Leu Asn  
 210 215 220

Tyr Asn Leu Lys Val Lys Val Leu Phe Asp Lys Asp Val Asn Glu Arg  
 225 230 235 240

Asn Thr Val Lys Gly Phe Arg Lys Phe Asn Ile Leu Gly Thr His Thr  
 245 250 255

Lys Val Met Asn Met Glu Glu Ser Thr Asn Gly Ser Leu Ala Ala Glu  
 260 265 270

Phe Arg His Leu Gln Leu Lys Glu Gln Lys Asn Ala Gly Thr Arg Thr  
 275 280 285

Asn Glu Gly Pro Leu Ile Val Thr Glu Glu Leu His Ser Leu Ser Phe  
 290 295 300

Glu Thr Gln Leu Cys Gln Pro Gly Leu Val Ile Asp Leu Glu Thr Thr  
 305 310 315 320

Ser Leu Pro Val Val Val Ile Ser Asn Val Ser Gln Leu Pro Ser Gly  
 325 330 335

Trp Ala Ser Ile Leu Trp Tyr Asn Met Leu Val Ala Glu Pro Arg Asn  
 340 345 350

Leu Ser Phe Phe Leu Thr Pro Pro Cys Ala Arg Trp Ala Gln Leu Ser  
 355 360 365



Glu Val Leu Ser Trp Gln Phe Ser Ser Val Thr Lys Arg Gly Leu Asn  
 370 375 380

Val Asp Gln Leu Asn Met Leu Gly Glu Lys Leu Leu Gly Pro Asn Ala  
 385 390 395 400

Ser Pro Asp Gly Leu Ile Pro Trp Thr Arg Phe Cys Lys Glu Asn Ile  
 405 410 415

Asn Asp Lys Asn Phe Pro Phe Trp Leu Trp Ile Glu Ser Ile Leu Glu  
 420 425 430

Leu Ile Lys Lys His Leu Leu Pro Leu Trp Asn Asp Gly Cys Ile Met  
 435 440 445

Gly Phe Ile Ser Lys Glu Arg Glu Arg Ala Leu Leu Lys Asp Gln Gln  
 450 455 460

Pro Gly Thr Phe Leu Leu Arg Phe Ser Glu Ser Ser Arg Glu Gly Ala  
 465 470 475 480

Ile Thr Phe Thr Trp Val Glu Arg Ser Gln Asn Gly Gly Glu Pro Asp  
 485 490 495

Phe His Ala Val Glu Pro Tyr Thr Lys Lys Glu Leu Ser Ala Val Thr  
 500 505 510

Phe Pro Asp Ile Ile Arg Asn Tyr Lys Val Met Ala Ala Glu Asn Ile  
 515 520 525

Pro Glu Asn Pro Leu Lys Tyr Leu Tyr Pro Asn Ile Asp Lys Asp His  
 530 535 540

Ala Phe Gly Lys Tyr Tyr Ser Arg Pro Lys Glu Ala Pro Glu Pro Met  
 545 550 555 560

Glu Leu Asp Gly Pro Lys Gly Thr Gly Tyr Ile Lys Thr Glu Leu Ile  
 565 570 575

Ser Val Ser Glu Val His  
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<210> 4

<211> 131

<212> PRT

<213> Homo sapiens

<400> 4

Met Ser Gln Trp Tyr Glu Leu Gln Gln Leu Asp Ser Lys Phe Leu Glu  
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Gln Val His Gln Leu Tyr Asp Asp Ser Phe Pro Met Glu Ile Arg Gln  
20 25 30

Tyr Leu Ala Gln Trp Leu Glu Lys Gln Asp Trp Glu His Ala Ala Asn  
35 40 45

Asp Val Ser Phe Ala Thr Ile Arg Phe His Asp Leu Leu Ser Gln Leu  
50 55 60

Asp Asp Gln Tyr Ser Arg Phe Ser Leu Glu Asn Asn Phe Leu Leu Gln  
65 70 75 80

His Asn Ile Arg Lys Ser Lys Arg Asn Leu Gln Asp Asn Phe Gln Glu  
85 90 95

Asp Pro Ile Gln Met Ser Met Ile Ile Tyr Ser Cys Leu Lys Glu Glu  
100 105 110

Arg Lys Ile Leu Glu Asn Ala Gln Arg Phe Asn Gln Ala Gln Ser Gly  
115 120 125

Asn Ile Gln  
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<210> 5

<211> 1746

<212> DNA

<213> Homo sapiens

<400> 5

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ttcaaatgca aaaccttgca gaacagagaa cacgagacca atggtgtggc aaagagtgat 180  
cagaaacaag aacagctggt actcaagaag atgtatttaa tgcttgacaa taagagaaaag 240  
gaagtagttc aaaaaataat agagttgctg aatgtcactg aacttaccca gaatgcctg 300  
attaatgatg aactagtgga gtggaagcgg agacagcaga gcgcctgtat tggggggccg 360  
cccaatgctt gcttgatca gctgcagaac tgggtcacta tagttgcgga gagtctgcag 420  
caagttcggc agcagcttaa aaagttggag gaattggaac agaaatacac ctacgaacat 480  
gaccctatca caaaaaacaa acaagtgtta tgggaccgca cttcagttt tttccagcag 540  
ctcattcaga gctcgtttgt ggtggaaaga cagccctgca tgccaacgca ccctcagagg 600  
ccgctgggtct tgaagacagg ggtccagttc actgtgaagt tgagactgtt ggtgaaattg 660  
caagagctga attataattt gaaagtcaaa gtcttatttg ataaagatgt gaatgagaga 720  
aatacagtaa aaggatttag gaagttcaac attttgggca cgcacacaaa agtgatgaac 780

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atggaggagt ccaccaatgg cagtctggcg gctgaatttc ggcacctgca attgaaagaa 840
cagaaaaatg ctggcaccag aacgaatgag ggtcctctca tcgttactga agagcttcac 900
tcccttagtt ttgaaaccca attgtgccag cctgggtttg taattgacct cgagacgacc 960
tctctgcccc ttgtggtgat ctccaacgtc agccagctcc cgagcggttg ggcctccatc 1020
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agccccgatg gtctcattcc gtggacgagg ttttgtaagg aaaatataaa tgataaaaaat 1260
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aaggaccagc agccggggac cttcctgctg cggttcagtg agagctcccg ggaagggggc 1440
atcacattca catgggtgga gcggtcccag aacggaggcg aacctgactt ccatgcggtt 1500
gaaccctaca cgaagaaaga actttctgct gttactttcc ctgacatcat tcgcaattac 1560
aaagtcatgg ctgctgagaa tattcctgag aatccctga agtatctgta tccaaatatt 1620
gacaaagacc atgcctttgg aaagtattac tccaggccaa aggaagcacc agagccaatg 1680
gaacttgatg gccctaaagg aactggatat atcaagactg agttgatttc tgtgtctgaa 1740
gttcac 1746

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<210> 6  
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 <212> DNA  
 <213> Homo sapiens

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<400> 6
atgtctcagt ggtacgaact tcagcagctt gactcaaaat tcttggagca ggttcaccag 60
ctttatgatg acagttttcc catggaaatc agacagtacc tggcacagtg gttagaaaag 120
caagactggg agcacgctgc caatgatgtt tcatttgcca ccacccgttt tcatgacctc 180
ctgtcacagc tggatgatca atatagtcgc ttttctttgg agaataactt cttgctacag 240
cataacataa ggaaaagcaa gcgtaatctt caggataatt ttcaggaaga cccaatccag 300
atgtctatga tcatttacag ctgtctgaag gaagaaagga aaattctgga aaacgcccag 360
agatttaatc aggctcagtc ggggaatatt cag 393

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<210> 7  
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 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:primer

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<400> 7
gggaattcca tatgagcaca gtgatgtag acaaac 36

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<210> 8  
 <211> 34  
 <212> DNA  
 <213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:primer

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cggatcctat tagtgaactt cagacacaga aatc

34

<210> 9  
<211> 17  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:primer

<400> 9  
gtattcccgt caatgca

17

<210> 10  
<211> 17  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:primer

<400> 10  
gtattcctgt aagatct

17

<210> 11  
<211> 17  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:primer

<400> 11  
gatttcccgt aaatcat

17

<210> 12  
<211> 17  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:primer

<400> 12

gttggtccgg gaaaagg

17

<210> 13

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:primer

<400> 13

agtcagttcc cgtcaatgca tcaggttccc gtcaatgcat

40

<210> 14

<211> 34

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:primer

<400> 14

agtcagttcc cgtcaatgag ttcccgtcaa tgca

34

<210> 15

<211> 43

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:primer

<400> 15

agtcagttcc cgtcaatgat cgctacagag ttcccgtcaa gca

43

<210> 16

<211> 40

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:primer

<400> 16

agtcatttcc cgtcaatgca tcagttgacg ggaaagtagt

40